

ATTACHMENT G – NOTICE OF INTENT

RECEIVED

MAR 23 2011

DIVISION OF WATER QUALITY

WATER QUALITY ORDER NO. 2011-XXXX-DWQ
GENERAL PERMIT NO. CAG XXXXXX

STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR BIOLOGICAL AND RESIDUAL PESTICIDE DISCHARGES TO WATERS OF THE
UNITED STATES
FROM VECTOR CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item ☒ A. New Applicator ☐ B. Change of Information: WDID# _____
☐ C. Change of ownership or responsibility: WDID# _____

II. DISCHARGER INFORMATION

A. Name Marin/Sonoma Mosquito & Vector Control District			
B. Mailing Address 595 Helman Lane			
C. City Cotati	D. County Sonoma	E. State CA	F. Zip Code 94931
G. Contact Person Erik Hawk	H. Email address erikh@msmosquito.com	I. Title Asst. Mgr	J. Phone (707) 285-2200

III. BILLING ADDRESS (Enter Information only if different from Section II above)

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip Code
G. Email address	H. Title	I. Phone	

IV. RECEIVING WATER INFORMATION

A. Biological and residual pesticides discharge to (check all that apply)*:

1. Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.
☐ Name of the conveyance system: N/A

2. Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.
☒ Owner's name: Sonoma + Marin County Flood Control, Sonoma Creek, Rush Creek
Name of the conveyance system: Laguna de Santa Rosa, Willard F.C.
has ball fields and other municipal water conveyance structures in
Miller Creek
Directly to river, lake, creek, stream, bay, ocean, etc.
☒ Name of water body: Spring Lake, Russian River
(see attached Petaluma River list)

* A map showing the affected areas for items 1 to 3 above may be included.

B. Regional Water Quality Control Board(s) where application areas are located
(REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 1 + 2
(List all regions where pesticide application is proposed.)

A map showing the locations of A1-A3 in each Regional Water Board shall be included.

V. PESTICIDE APPLICATION INFORMATION

A. Target Organisms: ☒ Vector Larvae ☒ Adult Vector

B. Pesticides Used: List name, active ingredients and, if known, degradation by-products
See attached list

C. Period of Application: Start Date 3/8/2011 End Date 3/8/2016

D. Types of Adjuvants Added by the Discharger: N/A

VI. PESTICIDES APPLICATION PLAN

A. Has a Pesticides Application Plan been prepared?*

☒ Yes ☐ No

If not, when will it be prepared? _____

* A copy of the PAP shall be included with the NOI.

B. Is the applicator familiar with its contents?

☒ Yes ☐ No

VII. NOTIFICATION

GENERAL NPDES PERMIT FOR BIOLOGICAL AND RESIDUAL
PESTICIDE DISCHARGES FROM VECTOR CONTROL APPLICATIONS

ORDER NO. 2011-XXXX-DWQ
NPDES NO. CAG 990004

Have potentially affected governmental agencies been notified?

☒ Yes ☐ No

* If yes, a copy of the notifications shall be attached to the NOI.

Through CEQA 2004
available at
www.ms.mosquito.com

VIII. FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

☒ Yes ☐ NO ☐ NA

IX. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name:

James A. Wanderscheid

B. Signature:

[Signature]

Date:

3/8/11

C. Title:

Manager

X. FOR STATE WATER BOARD USE ONLY

WDID:	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received: \$	Check #:

March 15, 2011

**Permitted Larvicides Used by Marin/Sonoma Mosquito & Vector
Control District**

<u>Product Name</u>	<u>Registration Number</u>
Vectolex CG Biological Larvicide	73049-20
Vectolex WDG Biological Larvicide	73049-57
Vectolex WSP Biological Larvicide	73049-20
Vectobac – 12AS	73049-38
Vectobac – G Biological Mosquito Granules	73049-10
Vectomax CG Biological Larvicide	73049-429
Zoecon Altosid Briquets (*)	2724-375
Zoecon Altosid Pellets	2724-448
Zoecon Altosid Liquid Larvicide	2724-392
Zoecon Altosid XR Extended Release Briquets	274-421
Zoecon Altosid Liquid Larvicide Concentrate	2724-446
Zoecon Altosid SBG Single Brood Granules	2724-489
BVA 2 Mosquito Larvicide Oil	70589-1
Agnique MMF Mosquito Larvicide & Pupacide	53263-28
Agnique MMF G	53263-30

(*) Note: Misspelled on Attachment F as Zoecon Altosid Pellets

March 16, 2011

**Permitted Adulticides Used by Marin/Sonoma Mosquito & Vector
Control District**

<u>Product Name</u>	<u>Registration Number</u>
Pyrocid Mosquito Adulticiding Concentrate for ULV Fogging 7396 = Pyrocid Mosquito Adulticiding Concentrate for ULV Fogging 7067	1021-1569
Zenivex E20	2724-791

Examples of Receiving Water Bodies (Mosquito and Vector Control) in Regional Water Quality Control Boards One and Two in Marin and Sonoma Counties

Any water body (natural or artificial) that has standing water for 72 to 96 hours can potentially provide mosquito habitat and require mosquito control (e.g. mitigated wetlands, seasonal wetlands, tidal marshes, storm water BMPs, ponds, lakes, creeks, flood control channels, low areas, roadside conveyance channels etc.). Therefore, it is not possible to provide an all inclusive list of water bodies in Marin and Sonoma Counties (RWQCBs 1 and 2) that are or could be receiving waters relative to mosquito control applications. The Marin/Sonoma Mosquito and Vector Control District submitted a map indicating its service area in Marin and Sonoma Counties and within RWQCBs 1 and 2. The list below includes examples of water bodies in RWQCB regions 1 and 2 that are receiving waters.

Receiving Water Examples: Region 1 – North Coast RWQCB (within service area – attached map).

Tidal Marshes – Immediately adjacent to San Pablo Bay, Petaluma River, Sonoma Creek, and Tolay Creek.

Seasonal Wetlands – Vernal pools in the Santa Rosa plain and Laguna de Santa Rosa watershed.

Lakes & Ponds – Spring Lake, Lake Sonoma, various agricultural ponds.

Receiving Water Examples: Region 2 – San Francisco Bay RWQCB (within service area – attached map).

Tidal Marshes – Immediately adjacent to San Pablo Bay, Bel Marin Keys, Hamilton AFB, Santa Venetia marsh, McNears marsh.

Seasonal Wetlands – Pt. Reyes National Seashore, Tomales Bay State Park, Rush Creek Marsh, China Camp State Park.

Lakes & Ponds – Stafford Lake, Nicasio Reservoir, various agricultural ponds.

This **list of watercourses in the San Francisco Bay Area** groups rivers, creeks, sloughs, etc. according to the bodies of water they flow into. Tributaries are listed under the watercourses they feed, sorted by the elevation of the confluence so that tributaries entering nearest the sea appear first. Numbers in parentheses are Geographic Names Information System feature ids.

Watercourses which feed into the Pacific Ocean in Sonoma County north of Bodega Head, listed from north to south:^[1]

The Gualala River and its tributaries

- Gualala River (253221):
 - North Fork (229679) - flows from Mendocino County.
 - South Fork (235010):
 - Big Pepperwood Creek (219227) - flows from Mendocino County.
 - Rockpile Creek (231751) - flows from Mendocino County.
 - Buckeye Creek (220029):
 - Little Creek (227239)
 - North Fork Buckeye Creek (229647):
 - Osser Creek (230143)
 - Roy Creek (231987)
 - Soda Springs Creek (234853)
 - Wheatfield Fork (237594):
 - Fuller Creek (223983):
 - Sullivan Creek (235693)
 - Boyd Creek (219738)
 - North Fork Fuller Creek (229676)
 - South Fork Fuller Creek (235005)
 - Haupt Creek (225023)
 - Tobacco Creek (236406)
 - Elk Creek (223108)
 - House Creek (225688):
 - Soda Spring Creek (234845)
 - Allen Creek (218142)
 - Pepperwood Creek (230514):
 - Danfield Creek (222007):
 - Cow Creek (221691)
 - Jim Creek (226237)
 - Grasshopper Creek (224470)
 - Britain Creek (219851)
 - Cedar Creek (220760)
 - Wolf Creek (238086)
 - Tombs Creek (236448)
 - Marshall Creek (228139):
 - McKenzie Creek (228391)

Northern Sonoma Coast

Watercourses which feed into the Pacific Ocean in Sonoma County between the Gualala and Russian Rivers, numbered from north to south:

1. Deadman Gulch (222120)
 2. Cannon Gulch (220545)
 3. Chinese Gulch (221069)
 4. Phillips Gulch (230598)
 5. Miller Creek (228727)
 6. Warren Creek (237257)
 7. Wildcat Creek (237784)
 8. Stockhoff Creek (235498)
 9. Timber Cove Creek (236355)
 10. Kolmer Gulch (226673)
 11. Fort Ross Creek (223705)
 12. Russian Gulch Creek (1723332):
 - o East Branch Russian Gulch (222861):
 - Middle Branch Russian Gulch (228574)
 - West Branch Russian Gulch (237436)
-
- Russian River (267200): - flows from Mendocino County.
 - o Willow Creek (237879)
 - o Sheephouse Creek (232916)
 - o Orrs Creek (230114)
 - o Freezeout Creek (223863)
 - o Austin Creek (218466):
 - Kohute Gulch (226672)
 - Kidd Creek (226569)
 - East Austin Creek (222846):
 - Black Rock Creek (219403)
 - Gilliam Creek (224171):
 - Schoolhouse Creek (232673)
 - Thompson Creek (236259)
 - Gray Creek (224517):
 - Lawhead Creek (234146)
 - Devil Creek (222279)
 - Conshea Creek (221468):
 - Tiny Creek (236385)
 - Sulphur Creek (235703)

- Ward Creek (237225):
 - Big Oat Creek (219223)
 - Blue Jay Creek (219496)
 - Pole Mountain Creek (230900)
 - Bearpen Creek (218919)
 - Red Slide Creek (231390)
- Dutch Bill Creek (222756):
 - Lancel Creek (226842):
 - North Fork Lancel Creek (229689)
- Smith Creek (233315)
- Hulbert Creek (253871):
 - Mission Creek (246001)
- Livereau Creek (227433)
- Fife Creek (223491):
 - Redwood Creek (231420)
- Pocket Canyon (230836):
 - Mays Canyon (228268)
- Hobson Creek (225380)
- Green Valley Creek (224576):
 - Atascadero Creek (218443)
 - Purrington Creek (231100)
- Mark West Creek (228118):
 - Windsor Creek (238013):
 - Pool Creek (230927)
 - Laguna de Santa Rosa (226766):
 - Santa Rosa Flood Control Channel (232565):
 - Abramson Creek
 - Piner Creek
 - Paulin Creek
 - Santa Rosa Creek (232563):
 - Matanzas Creek (228216):
 - Spring Creek (235241)
 - South Fork Matanzas Creek (235025)
 - Brush Creek
 - Salt Creek (232297)
 - Blucher Creek (219480)
 - Five Creek (223565)
 - Hinebaugh Creek (225359):
 - Crane Creek (221795)
 - Washoe Creek (237318):
 - Gossage Creek (224355)
 - Copeland Creek (221533)
 - Porter Creek (230952)
 - Humbug Creek (225753)
 - Van Buren Creek (236996)
 - Porter Creek (230951):

- Press Creek (231039)
- Dry Creek (222623): - flows from Mendocino County.
 - West Slough:
 - Foss Creek (1657225):
 - Norton Slough (1657226)
 - Mill Creek (228686):
 - Felta Creek (223436)
 - Wallace Creek (237193)
 - Palmer Creek (230265)
 - Pine Ridge Canyon (230719)
 - Kelley Creek (226456)
 - Crane Creek (221794)
 - Grape Creek (224441):
 - Wine Creek (238037)
 - Peña Creek (230478):
 - Chapman Branch (220914)
 - Boyer Creek (219744)
 - Pechaco Creek (230457)
 - Redwood Log Creek (231443)
 - Dutcher Creek (222780)
 - Fall Creek (223368)
 - Schoolhouse Creek (232676)
 - Warm Springs Creek (237246):
 - Little Warm Springs Creek (227406)
 - Picnic Creek (230623)
 - Seven Oaks Creek (232821)
 - Bear Creek (218806)
 - Rancheria Creek (231215):
 - Little Rancheria Creek (234172)
 - Stawberry Creek (235583)
 - Little Strawberry Creek (227381)
 - Willow Springs Creek (237952)
 - Wild Cattle Creek (237748)
 - Bearpen Creek (218918)
 - Fall Creek (223365)
 - Brush Creek (219923)
 - Yorty Creek (238273)
 - Smith Creek (233325)
 - Cherry Creek (233660)
 - Galloway Creek (224021) - flows from Mendocino County.
 - Rail Creek (231170)
- Maacama Creek (227883):
 - Franz Creek (223840):
 - Bidwell Creek (219108)
 - Redwood Creek (231421):
 - Foote Creek (223653)

- Kellogg Creek (226462)
 - Yellowjacket Creek (238248)
- Briggs Creek (219834):
 - Little Briggs Creek (227202)
 - Coon Creek (221498)
- McDonnell Creek (228350)
- Sausal Creek (232603):
 - George Young Creek (224117)
 - Burns Creek (220208)
 - Grapevine Creek (224446)
- Gird Creek (224187)
- Miller Creek (228731)
- Gill Creek (224167)
- Crocker Creek (221835)
- Barrelli Creek (218695)
- Porterfield Creek (230956)
- Cloverdale Creek (221256)
- Big Sulphur Creek (254619):
 - Little Sulphur Creek (227384):
 - North Branch (229605)
 - Lovers Gulch Creek (227735)
 - Anna Belcher Creek (218287)
 - Frasier Creek (223845) - flows from Mendocino County.
 - Squaw Creek (235310):
 - Alder Creek (218097) - flows from Mendocino County.
 - Hummingbird Creek (225758) - flows from Mendocino County.
- Ash Creek (218427) - flows from Mendocino County.

Watercourses which feed into the Pacific Ocean in Sonoma County between the Gualala and Russian Rivers, numbered from north to south:

1. Deadman Gulch (222120)
2. Cannon Gulch (220545)
3. Chinese Gulch (221069)
4. Phillips Gulch (230598)
5. Miller Creek (228727)
6. Warren Creek (237257)
7. Wildcat Creek (237784)
8. Stockhoff Creek (235498)
9. Timber Cove Creek (236355)
10. Kolmer Gulch (226673)
11. Fort Ross Creek (223705)
12. Russian Gulch Creek (1723332):
 - East Branch Russian Gulch (222861):

- Middle Branch Russian Gulch (228574)
- West Branch Russian Gulch (237436)

Watercourses which feed into the Pacific Ocean in Sonoma County between Goat Rock Beach and Bodega Head, numbered from north to south:

1. Scotty Creek (232742):
 - Rough Creek (231923)
2. Salmon Creek (232281):
 - Finley Creek (223507)
 - Coleman Valley Creek (221373)
 - Fay Creek (223419)
 - Tannery Creek (236018)
 - Nolan Creek (229570)
 - Thurston Creek (236333)

Watercourses which feed into Bodega Bay, numbered clockwise from Bodega Head to Sand Point:

1. Cheney Gulch (220937)
2. Shorttail Gulch (233054)
3. Estero Americano (223257):
 - Ebabias Creek (253711)
 - Americano Creek (254563)
4. Estero de San Antonio (253212):
 - Stemple Creek (253932)

Watercourses which feed into the Pacific Ocean in Marin County south of Sand Point, listed from north to south:

Tomales Bay

Watercourses which feed into Tomales Bay, numbered clockwise from Sand Point to Tomales Point:

1. Walker Creek (255208):
 - Keys Creek (254852)
 - Chileno Creek (254740)
 - Frink Canyon (223952)
 - Verde Canyon (237053)
 - Salmon Creek (232280)
 - Arroyo Sausal (254577)
2. Millerton Gulch (228754)
3. Grand Canyon (224386)

4. Tomasini Canyon (236446)
5. Lagunitas Creek (255208):
 - o Olema Creek (234410)
 - o Nicasio Creek (229534):
 - Halleck Creek (224814):
 - Redwood Canyon (231415)
 - o San Geronimo Creek (232400)
 - o Big Carson Creek (219156)
 - o Cataract Creek (220721)
 - o East Fork Lagunitas Creek (222888)
6. White Gulch (237641)

Point Reyes Peninsula

Watercourses which feed into the Pacific Ocean between Tomales Point and Bolinas, numbered north to south:^[2]

1. Home Ranch Creek (225499)
2. Glennbrook Creek
3. Santa Maria Creek
4. Coast Creek (233695)
5. Alamere Creek (233404)
6. Arroyo Hondo

Bolinas Lagoon

Watercourses which feed into Bolinas Lagoon, numbered clockwise from Bolinas to Stinson Beach:

1. Pine Gulch Creek (234476):
 - o Copper Mine Gulch (221541)
2. Wilkins Gulch (237829)
3. Pike County Gulch (230651)
4. Audubon Canyon (218457)
5. Volunteer Canyon (1808968)
6. Morses Gulch (229094)
7. McKinnan Gulch (228412)
8. Stinson Gulch (235491)

Southern Marin Coast

Watercourses which feed into the Pacific Ocean between Stinson Beach and the Golden Gate, numbered north to south:

1. Webb Creek (237375)
2. Lone Tree Creek (227525)
3. Cold Stream (221345)
4. Redwood Creek (231428)
 - o Fern Creek (223455)
5. Tennessee Valley (255127)

Source: http://en.wikipedia.org/wiki/List_of_watercourses_in_the_San_Francisco_Bay_Area

March 3, 2011

DIVISION OF WATER QUALITY

Marin/Sonoma Mosquito and Vector Control District Pesticide Application
Plan

General NPDES Permit For Residual Pesticide Discharges From Mosquito
Control Applications Order NO. 2004-0008-DWQ

1. The NPDES Permit requires a Pesticides Application Plan (PAP) that contains the following elements:

a. Description of the target area and adjacent areas, if different from the water body of the target area:

The Marin/Sonoma Mosquito and Vector Control District (MSMVCD) boundaries extend north to the Mendocino County Line (just north of the town of Cloverdale), to San Francisco County to the South (just south of Sausalito), Lake, Napa, and Solano Counties to the east, and the Pacific Ocean to the west. Please see attached map and map on page 21 Best Management Practices for Mosquito Control in California (California Department of Public Health, August 2010) and Draft Initial Study and Mitigated Negative Declaration, MSMVCD CEQA 2004 (CEQA 2004).

b. Discussion of the factors influencing the decision to select pesticide applications for mosquito control:

Please see the Best Management Practices for Mosquito Control in California.

c. Types(s) of pesticides used, the method in which they are applied, and if applicable, the adjuvants and surfactants used:

Please see the Best Management Practices for Mosquito Control in California, attached Notice of Intent, and CEQA 2004.

d. Description of the types and locations of the anticipated application area and the target area to be treated by the Discharger, recognizing that, with vector control, the precise locations may not be known until after surveillance:

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is MSMVCD's preferred solution, and whenever possible MSMVCD works with agencies and property owners to effect long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California. The typical sources treated by MSMVCD include:

Seasonal wetlands

Tidal marshes

Storm water treatment, hydro modification control, and conveyance systems

Agricultural and recycled water irrigation practices (fields/pastures)

Ponds (ornamental, wildlife, recycled water irrigation recovery, frost protection...)

Low area/seasonal depressions

Septic tanks

Standing water under buildings

Containers (livestock tanks, rain barrels, planters, etc..)

Oak woodlands with populations of tree hole mosquitoes

e. Other control methods used (alternatives) and their limitations:

With any mosquito or other vector source, MSMVCD's first goal is to look for ways to eliminate the source, or, if that is not possible, for ways to reduce the vector potential. The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California. Specific methods used by MSMVCD include educating the public regarding mosquito biology and encouraging residents to eliminate sources of standing water on their property, and working with property owners to find long-term water management strategies that meet their needs while minimizing the need for public health pesticide applications. Public relations methods utilized in this program include, newspaper articles, radio commercials, billboards, brochures, education booths (fairs, home shows, and other community events), and annual MSMVCD open house event. MSMVCD has an educational program that includes presentations at schools to educate students regarding mosquito biology, vector-borne diseases, and mosquito source reduction. MSMVCD also works collaboratively with municipalities and regulatory agencies in the design and review of projects with the intent of minimizing the potential of mosquito production and the need for repeated pesticide applications. For example, MSMVCD participates in the design and review processes for storm water conveyance, treatment, and control systems and is involved with the wetland community with regard to planning, design, and management of seasonal wetlands and tidal marshes. MSMVCD also stocks mosquito fish (*Gambusia affinis*) when and where appropriate as biological control tool.

f. Approximately how much product is anticipated to be used and how this amount was determined:

See attached pesticide application summary from 2010

g. Representative monitoring locations and the justification for selecting these monitoring locations:

Please see the Mosquito and Vector Control Association of California (MVCAC) NPDES Coalition Monitoring Plan

- h. Evaluation of available BMPs to determine if there are feasible alternatives to the selected pesticide application project that could reduce potential water quality impacts:**

Please see the Best Management Practices for Mosquito Control in California and CEQA 2004.

- i. Description of the BMPs to be implemented:**

Please see the Best Management Practices for Mosquito Control in California and CEQA 2004.

- 2. The Discharger shall update the PAP periodically and submit the revised PAP to the State Water Board for approval if there are any changes to the original PAP.**

D. Best Management Practices (BMPs)

The Discharger shall develop BMPs that contain the following elements:

MSMVCD BMPs are described in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan and CEQA 2004.

- ## 1. Identify the Problem

Prior to first pesticide application covered under the General Permit that will result in a discharge of residual pesticides to waters of the US, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Discharger must do the following for each vector management area:

- a. Establish densities for larval and adult vector populations to serve as action threshold(s) for implementing pest management strategies

Only those mosquito sources that District staff determines to represent imminent threats to public health or quality of life are treated. The presence of any mosquito may necessitate treatment; however different thresholds may be applied depending on MSMVCD's resources, disease activity, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- Mosquito species present
- Mosquito stage of development
- Pest, nuisance, or disease potential
- Disease activity
- Mosquito abundance
- Flight range
- Proximity to populated areas

- Size of source
- Presence/absence of natural enemies or predators
- Presence of sensitive/endangered species or habitats

b. Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species:

Please see the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan and CEQA 2004.

c. Identify known breeding areas for source reduction, larval control program, and habitat management:

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is MSMVCD's preferred solution, and whenever possible MSMVCD works with property owners to implement long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California and CEQA 2004.

d. Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.

This is included in the Best Management Practices for Mosquito Control in California, CEQA 2004, and the California Mosquito-borne Virus Surveillance and Response Plan. MSMVCD continually collects adult and larval mosquito surveillance data to guide mosquito control activities.

2. Examine the Possibility of Alternatives to Treatment

Dischargers should continue to examine the possibility of alternatives to reduce the need for applying larvicides that contain temephos and for spraying adulticides. Such methods include:

a. Evaluating management and treatment options that may impact water quality, non-target organisms, vector resistance, feasibility, and cost effectiveness, such as:

- No action
- Source prevention
- Mechanical or physical source reduction methods
- Cultural methods
- Biological control agents
- Pesticides

- b. Applying pesticides only when vectors are present at a level that will constitute a nuisance or threat to public health**
- c. Using the least intrusive method of pesticide application**
- d. Public education efforts to reduce potential vector breeding habitat.**
- e. Applying a decision matrix concept to the choice of the most appropriate formulation.**

This describes MSMVCD's existing integrated vector management (IVM) program, as well as the practices described in the California Mosquito-borne Virus Surveillance and Response Plan, CEQA 2004, and Best Management Practices for Mosquito Control in California that are used by this agency.

3. Correct Use of Pesticides

Users of pesticides must ensure that all reasonable precautions are taken to minimize the impacts caused by pesticide applications. Reasonable precautions include using the proper spraying techniques and equipment, taking account of weather conditions and the need to protect the environment.

- a. All errors in application and spills are reported to the proper authority.**
- b. Staff training in the proper application of pesticides and handling of spills.**

This is an existing practice of MSMVCD, and is required to comply with the Department of Pesticide regulations (DPR) requirements and the terms of our California Department of Public Health (CDPH) Cooperative Agreement. All pesticide applicators receive annual safety and spill training in addition to their regular continuing education. Each applicator receives forty hours of continuing education units (CEU) in a two year cycle.

E. Pesticide Application Log

The Discharger shall maintain a log for each pesticide application. The application log shall contain, at a minimum, the following information, when practical, for larvicide or adulticide applications:

- 1. Date of application;**
- 2. Location of the application and target areas (e.g. address, crossroads, or map coordinates);**
- 3. Name of applicator;**
- 4. The names of the water bodies treated if known/ named (i.e., canal, creek, lake, etc.);**
- 5. Application details, such as when the application started and stopped, pesticide application rate and concentration, water flow rate of the target area, surface water area, volume of water treated, pesticide(s) and adjuvants used by the discharger, and volume or mass of each component discharged:**

This is an existing practice of MSMVCD as required to comply with the DPR regulations and our CDPH Cooperative Agreement requirements.

References:

Best Management Practices for Mosquito Control in California. 2010. Available by download from the California Department of Public Health—Vector-Borne Disease Section at <http://www.cdph.ca.gov/HealthInfo/discond/Pages/MosquitoBorneDiseases.aspx> or <http://www.westnile.ca.gov/resources.php> under the heading Mosquito Control and

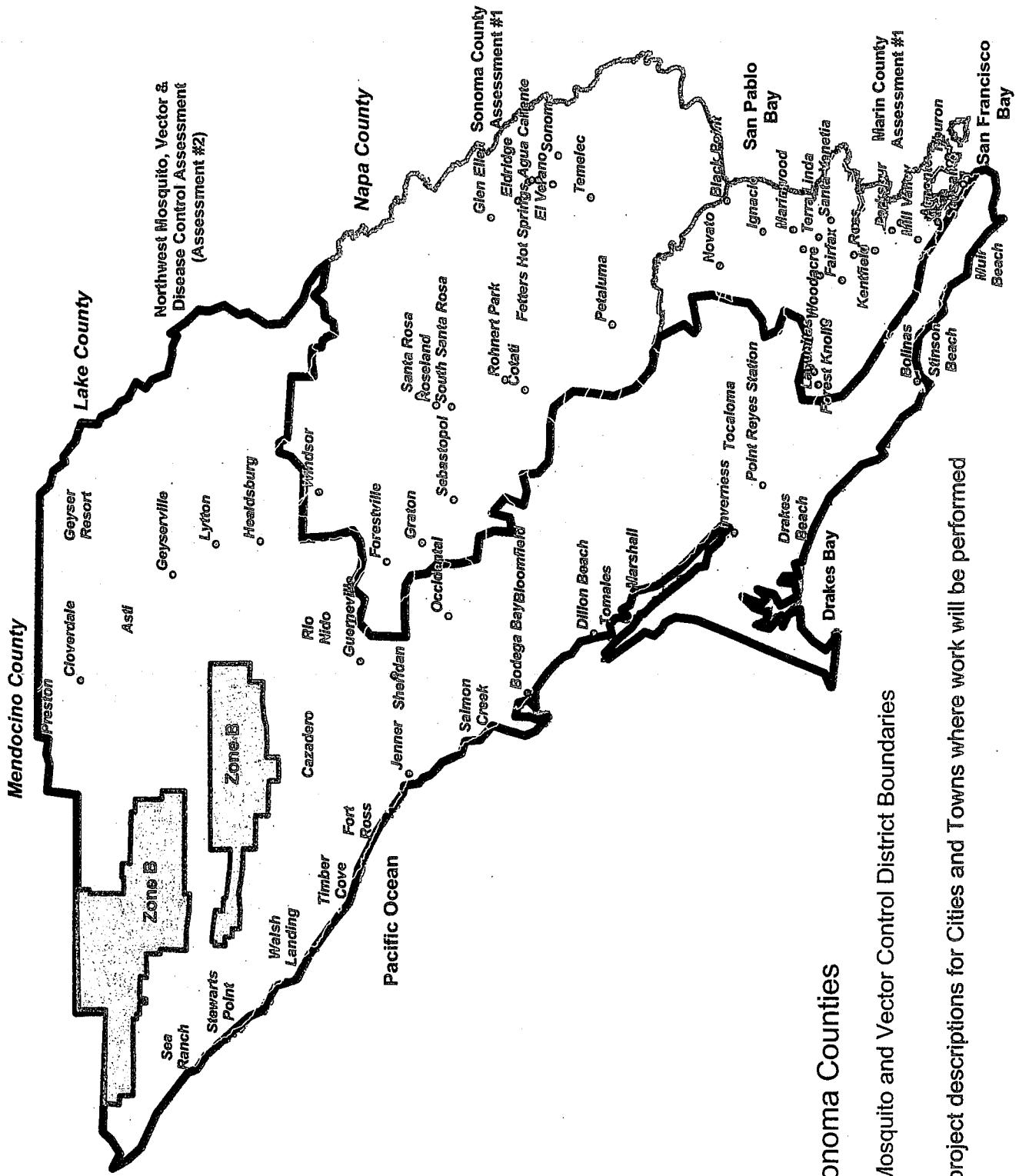
March 3, 2011

Repellent Information. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Marin/Sonoma Mosquito and Vector Control District at 800-231-3236.

California Mosquito-borne Virus Surveillance and Response Plan. 2010. [Note: this document is updated annually by CDPH]. . Available by download from the California Department of Public Health—Vector-Borne Disease Section at <http://www.cdph.ca.gov/HealthInfo/discond/Pages/MosquitoBorneDiseases.aspx> or <http://www.westnile.ca.gov/resources.php> under the heading Response Plans and Guidelines. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Marin/Sonoma Mosquito and Vector Control District at 800-231-3236

Marin/Sonoma Mosquito and Vector Control District, California Environmental Quality Act (CEQA), Revised June 14, 2004. Available at www.msmosquito.com

MVCAC NPDES Coalition Monitoring Plan. 2011.



Marin and Sonoma Counties

Marin/Sonoma Mosquito and Vector Control District Boundaries

*See individual project descriptions for Cities and Towns where work will be performed

PESTICIDE USE REPORT - All Products

From: 1/1/2010 To: 12/31/2010

Operator: Marin/Sonoma Mosquito and Vector Control District	Address: 595 Helman Lane	City: Cotati	Zip Code: 94931	Phone Number: 707-285-2200
County (where applied): Sonoma			Total Applications: 7359	

Description	Registration Number	Total Product Used	Unit Of Measure	Number of Applications	Acres Treated
Agnique MMF	53263-28	32.1215	GAL	696	47.9778
Altosid Pellets	2724-448	640.9569	LB	408	198.8470
Altosid Briquets (small)	2724-375	10.1019	LB	205	17.1631
Altosid Briquets XR	2724-421	467.8303	LB	1322	57.3445
Altosid Liquid Larvicide	2724-392	21.2265	GAL	183	554.2735
Altosid SBG	2724-489	257.3278	LB	30	37.9501
BVA2	70589-1	308.4175	GAL	373	65.4216
Deltadust (YJ)	432-772	6.4375	LB	77	30.4087
Drione Insecticide	432-992	12.6625	LB	167	84.3086
GB1111	8329-72	85.1467	GAL	118	17.8551
Mosquito Fish		14,237.0000	EA	1206	558.7735
Pyrocid 5% - GAL	1021-1569	71.6412	GAL	525	11,150.8985
Sand		68.8733	LB	19	5.8014
Vectobac 12AS	73049-38	415.7888	GAL	677	1,601.9421
Vectobac Corncob Granules - BTI	73049-10	478.6130	LB	68	33.6998
Vectobac Technical Powder	73049-13	3.0956	LB	20	5.8027
VectoBac WDG	73049-56	14.0000	LB	1	16.0000
Vectolex WSP	73049-20	14.6520	LB	188	35.0861
Vectolex CG	73049-20	8,095.9864	LB	557	718.1557
Vectolex WDG	73049-57	205.7940	LB	200	252.0645
Vectomax CG	73049-429	3,960.5302	LB	312	297.9854
Wasp Freeze	499-362	0.0789	GAL	5	0.3001
Zenivex	2724-791	0.9035	GAL	2	392.1400

PESTICIDE USE REPORT - All Products

From: 1/1/2010 To: 12/31/2010

Operator: Marin/Sonoma Mosquito and Vector Control District	Address: 595 Helman Lane	City: Cotati	Zip Code: 94931	Phone Number: 707-285-2200
County (where applied): Marin			Total Applications: 5407	

Description	Registration Number	Total Product Used	Unit Of Measure	Number of Applications	Acres Treated
Agnique MMF	53263-28	17.4874	GAL	468	18.6937
Altosid Pellets	2724-448	427.3801	LB	391	134.8692
Altosid Briquets (small)	2724-375	2.6250	LB	79	500.0929
Altosid Briquets XR	2724-421	431.1841	LB	1658	459.9106
Altosid Liquid Larvicide	2724-392	28.9799	GAL	173	943.4417
Altosid Liquid Larvicide SR20	2724-446	0.1045	GAL	4	11.5344
Altosid SBG	2724-489	16.0000	LB	4	1.4900
BVA2	70589-1	378.9139	GAL	674	80.4643
Deltadust (YJ)	432-772	17.8440	LB	207	21.1085
Drione Insecticide	432-992	15.7000	LB	110	7.1150
GB1111	8329-72	3.8553	GAL	81	0.9328
Mosquito Fish		6,159.0000	EA	389	18.9320
Pyrocid 5% - GAL	1021-1569	6.5060	GAL	165	1,012.2626
Sand		4.5113	LB	30	0.2972
Vectobac 12AS	73049-38	345.0753	GAL	325	1,467.9440
Vectobac Corncob Granules - BTI	73049-10	291.9650	LB	69	28.1565
Vectobac Technical Powder	73049-13	0.2027	LB	30	0.2972
Vectolex WSP	73049-20	9.3500	LB	181	12.3508
Vectolex CG	73049-20	2,808.3054	LB	238	223.9490
Vectolex WDG	73049-57	121.9055	LB	44	115.9441
Vectomax CG	73049-429	309.3455	LB	76	29.8020
Wasp Freeze	499-362	0.5234	GAL	11	13.0029